BARCLAYS

Equity Research

15 July 2020

North America Power & Utilities

Water valuations are hot, but have they boiled over?

We initiate coverage on AWK and WTRG with Equal Weight ratings: Water valuations have seemingly lost all correlation to electric and gas utilities, as the group P/E multiple has expanded to a ~10-turn premium. However, we see little evidence of the spread contracting near term, as we view investor expectations as reasonable and near-term earnings headwinds as scarce. Increasing reliance on rate cases throughout the forecast period represent the largest sector-wide risk factor through our 2022 forecast horizon, but customer bill offsets exist for some, and overall customer bill inflation appears palatable.

Scarcity value and ESG narrative likely to drive premium for foreseeable future, in our view: Regardless of fundamental similarities to electric and gas utility counterparts, we expect the water premium to persist as scarcity and index composition drive ownership diversity and support water valuations for the foreseeable future. Water utilities also benefit from their lack of electric generation exposure that disqualifies some utilities on ESG screens, and we see increased environmental regulation on water quality coupled with fair market value legislation as adding a compelling qualitative ESG narrative as investor-owned water utilities provide needed financing for cash-strapped public agencies, particularly following the impact of COVID-19 on public budgets.

Recent execution and industry tailwinds likely mean EPS CAGRs moderate somewhat, but growth backlog and visibility still exceed electric peers: AWK and WTRG possess unique scale that position both to play leading roles in a national water infrastructure replacement cycle in the US. Chronic under-investment in water infrastructure has led the American Society of Civil Engineers to estimate that $1tn of total infrastructure spending is needed over the coming 25 years to repair and replace aging infrastructure. The market position dominance is unmatched in the electric utility space (NEE is probably closest with NEER). We see the scale advantage and reputation for best-in-class management providing greater confidence and visibility into capital deployment and growth. External financing needs likely increase relative to previous years given cash tax positions and balance sheet limitations; we see modest ROE lag between cases as possible, but still believe EPS and rate base growth exceed the average electric utility.

Valuation framework: We arrive at a $138 price target for AWK and a $45 price target for WTRG and rate both Equal Weight. We utilize a 27x 2022 P/E group average multiple base for water utilities and a 17x general utility group average multiple for WTRG's gas business. We apply our standard premium and discount valuation framework to arrive at a 15% water premium for AWK and a 5% and 15% premium for WTRG's water and gas business, respectively.

INITIATING COVERAGE

North America Power & Utilities
POSITIVE
Unchanged

For a full list of our ratings, price targets and earnings in this report, please see table on page 2

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Summary of our Ratings, Price Targets and Earnings Estimates in this Report

Company	Rating		Price	Price Target			EPS FY1 (E)			EPS FY2 (E)		
	Old	New	13-Jul-20	Old	New	%Chg	Old	New	%Chg	Old	New	%Chg
North America Power & Utilities	Pos	Pos										
American Water Works Company, Inc. (AWK)	N/A	**EW**	132.97	N/A	**138.00**	-	N/A	**3.86**	-	N/A	**4.22**	-
Essential Utilities, Inc. (WTRG)	N/A	**EW**	43.37	N/A	**45.00**	-	N/A	**1.56**	-	N/A	**1.67**	-

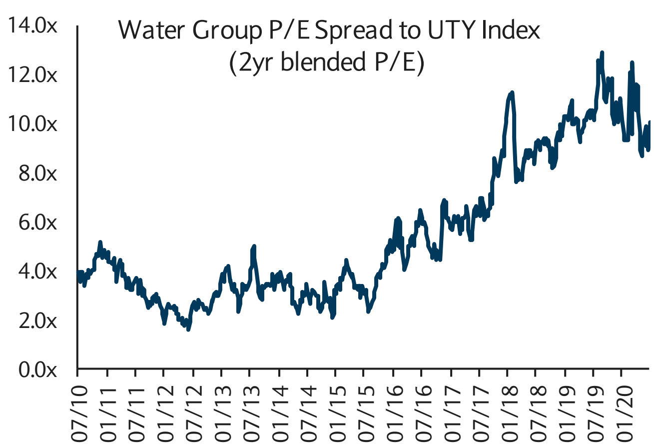
Source: Barclays Research. Share prices and target prices are shown in the primary listing currency and EPS estimates are shown in the reporting currency.
FY1(E): Current fiscal year estimates by Barclays Research. FY2(E): Next fiscal year estimates by Barclays Research.
Stock Rating: OW: Overweight; EW: Equal Weight; UW: Underweight; RS: Rating Suspended
Industry View: Pos: Positive; Neu: Neutral; Neg: Negative

Is Water Just Worth More Than Electricity?

Water Valuation Premium Continues to Expand

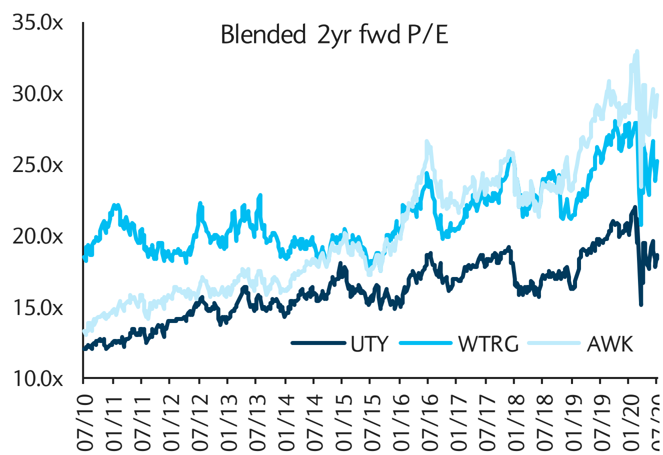
Water utilities have seemingly broken free of any tether to electric and gas utilities in recent years and there are no signs that the gap will close. We use AWK, WTRG, CWT, and AWR as our water utility basket for all group average calculations. The premium would screen even greater, but we exclude securities with a market cap below $2bn (MSEX, SJW, YORW), as we believe limited trading liquidity and embedded takeout premiums would misrepresent comparisons to the traditional US utility under coverage. The pace of the expansion has been particularly notable as the group hovered between 2x-4x premium from 2010 through 2015 before expanding to >10x since early 2019. AWK currently trades at a record 11.5x premium to the UTY.

FIGURE 1
Water P/E Spread to UTY Index



Source: Bloomberg, Barclays Research

FIGURE 2
AWK and WTRG P/E Spread to UTY Index



Source: Bloomberg, Barclays Research

Is That Premium Justified?

Valuation has dominated the debate for the water sector as a whole for the last few years. The duration and apparent sustainability of the premium is notable, in our view, and cannot be dismissed as irrational or transient.

We present our view of current market sentiment on water utilities in the following "Bulls say, Bears say, Barclays says" section before going into additional detail on what we view as the three most compelling justifications for the premium.

Bulls, Bears, Barclays

***Bulls say:** Water utilities are advantaged to electric and gas given a more visible long-term capital deployment and earnings growth opportunity, lower earnings and operational risk, and cleaner ESG attributes.*

- **1) Long-term EPS and dividend growth are more than enough to justify price:** AWK's 7-10% growth guidance is ongoing and sustainable long term and justify prices when applied to DCF and dividend-based valuation frameworks. If recently authorized ROE decisions made by state regulatory commissions are correct (most use some derivation of CAPM), the cost of equity capital for most US utilities like AWK and WTRG is ~9.0-9.5x. Assuming AWK can maintain a 7-10% CAGR, the current <2.0% dividend yield is more than adequate for equity investors.

- **2) Rate base growth opportunity is larger and more visible than electric and gas:** Average system age indicates the US is approaching a multi-generational water infrastructure replacement cycle. The investment need is larger than electric and gas, and AWK and WTRG have the scale to become the 'first call' from public officials and legislators when towns are unable to afford upgrades required to stay in compliance. The recent wave of fair market value legislation (FMVL) that passed state legislatures is evidence that public officials understand the need for and support private investment in water systems. The economic impact of COVID-19 on public tax revenues and financial positions will also increase the likelihood of reaching agreement with systems previously unwilling. Additionally, water utilities have greater residential customer bill headroom to pursue rate base growth compared to typical residential electric and gas bills.

- **3) Water utility ESG profiles are more attractive than electric or gas:** Water utilities provide ESG-constrained funds, which may be barred from owning generation or gas assets, an opportunity to gain utility sector exposure. The core growth driver of a water utility is to deploy capital that ensures reliable, efficient, and safe delivery of drinking water and treatment of wastewater, which sustainability-focused funds should find attractive (particularly as water scarcity issues grow). There is also an environmental angle for water utilities, as they could benefit from a wave of environmental regulations (emerging contaminants, like PFAS, are a near-term focus as capex / rate base growth will increase and local municipalities turn to investor-owned utilities with greater capital access and operational expertise.

- **4) Lower operational and earnings risk:** Water infrastructure compares favorably to common electric and gas utility risk factors such as workplace safety, environmental violations and related lawsuits, wildfires, and cost recovery uncertainty as renewable replacement accelerates. Earnings are also more predictable, as revenues are less reliant on weather than electric and gas. Water capex plans consist of thousands of small, diverse projects, lacking the large project risk (execution, environmental permitting, legal challenges) that electric and gas utilities are often exposed to.

***Bears say:** Valuations are overdone, equity capital raises will be larger and more frequent, regulated acquisitions are becoming more challenging, ROE lags, and rate case exposure presents greater risk.*

- **1) Current valuations are unapproachable:** All-time high valuations are pricing in unsustainable long-term growth assumptions based on earnings outperformance over the past five years that will settle closer to consensus electric EPS CAGRs over time. With no other apparent distinctions between an electric and water utility with similar regulatory exposure, water stocks carry a 10-turn 'air pocket' on a P/E basis that will fall out as long-term growth assumptions converge.

- **2) Future equity needs will be higher than the past few years:** Debt metrics and parent leverage will approach rating agency thresholds given cash flow projections relative to the size of current capex and regulated M&A plans, requiring greater and more frequent reliance on equity capital markets. The equity need will be amplified as utilities become cash taxpayers (AWK sees payments starting in modest ~2021; $~200mn annual cash source currently). Early evidence can be seen with AWK's inclusion of $500mn of equity in its five-year capital plan and WTRG's $300mn planned issuance in late 2020/1Q21 (timing depends on Delcora outcomes).

- **3) Municipal acquisitions are not the panacea that some think they are:** M&A executed immediately following passage of fair market value bills likely attracted public systems that needed financing most desperately and were most motivated to sell. Recent complications and community pushback relates primarily to concerns about losing both control over freshwater supply and public tax revenues. Negotiating leverage will continue to strengthen over time and municipalities will likely require more onerous terms like customer bill commitments and employee retention, in addition to a pure financial contribution. Regulatory commissions that employ single-tariff ratemaking structures have also limited the ability for utilities to get 'back door' rate recovery without a new general rate case (GRC).

- **4) Rate case reliance and risk of under-earning is higher for water than for electric or gas:** The public M&A component (driven by fair market value legislation discussed in greater detail on page 9) of rate base growth means water companies often carry newly-acquired assets for a time before integrating the assets in rate calculations (leads to regulatory lag). As noted above, the negotiating table for public M&A is likely to become more competitive and investor-owned utilities will often compete for deals with commitments on customer bill increases.

***Barclays says:** Valuations are objectively high, but there is no clear catalyst for compression; scarcity value is likely the main rationale for valuation premium; long-term earnings and rate base growth could moderate somewhat but still outpace electric and gas growth, and visibility clearly leads peers.*

1) Water utilities are still utilities, but valuation premium shows little: We believe any new fundamentals-driven investment in US water utilities requires a long time horizon and the view that the infrastructure replacement cycle will drive EPS growth in excess of most electric utilities. However, there are non-financial factors (e.g. ESG, thematic) attracting capital to the sector. We note AWK's spread to the UTY has been at or near all-time highs since diverging in 2013 (including the current all-time high). We see no imminent catalyst for water valuations to compress to electric utility levels, and thus we utilize a water group average P/E multiple of 27x for our valuation framework.

2) Earnings execution and outlook is strong, but scarcity value is the most compelling justification for the premium: We see scarcity value for publicly traded water equities as a large component of the premium that AWK and other regulated water utilities command. AWK represents ~10% of the S&P Global Water Index and security-specific shareholder composition implies a broader base of investors for both AWK and WTRG than the typical electric utility (both in geography and fund style).

3) Recent execution and industry tailwinds likely mean EPS CAGRs moderate somewhat, but growth backlog and visibility still exceeds electric peers: AWK and WTRG possess unique scale that position both to play leading roles in any water infrastructure replacement programs in the US. The American Society of Civil Engineers estimates that $1tn of total infrastructure spending is needed over the coming 25 years to repair and replace aging infrastructure. The market position dominance is unmatched in the electric utility space (NEE is probably closest with NEER). We also see the scale advantage and reputation for best-in-class management providing greater confidence and visibility into capital deployment and growth. External financing needs likely increase relative to previous years given cash tax positions and we see modest ROE lag between cases as possible, but overall we still believe EPS and rate base growth exceed the average electric utility.

4) ESG is often highlighted as a justification for higher valuations – we agree that the lack of generation allows some funds to own water utilities that cannot own electric and that a strong sustainability narrative exists, however there are material ESG risks inherent to the water utility business model that must be weighed by ESG-focused investors. The ESG pitch for water utilities is that a water utility's core business model is to invest capital in a chronically under-invested US water infrastructure system in order to enhance of an increasingly scarce resource and ensure safe drinking water and more environmentally-responsible wastewater treatment and management. The infrastructure investment embedded in water utility capex plans is based on the need to update pipelines that can be centuries old, improving both water quality (replace lead pipes and lower total effluents) and leakage (water scarcity issues should increase scrutiny on 'treated but not delivered' volumes). We also see a 'social' benefit when classifying customer disposable income as a social benefit, as investor-owned utilities have the unique opportunity to socialize and smooth community and customer financial impacts by utilizing single-tariff ratemaking and longer amortization periods given stronger capital market access. However, for all the positive ESG narratives that water utilities have exposure, there are material ESG risks inherent to doing business as a water utility – including spills, chemical usage, politicized under-investment and customer bill impacts, potential bribery, and workplace safety. The risk exposure to potential ESG disasters make management competency, ethics, Board oversight, and technical expertise critical to any ESG analysis.

Diving Deeper on Valuation Premium Drivers

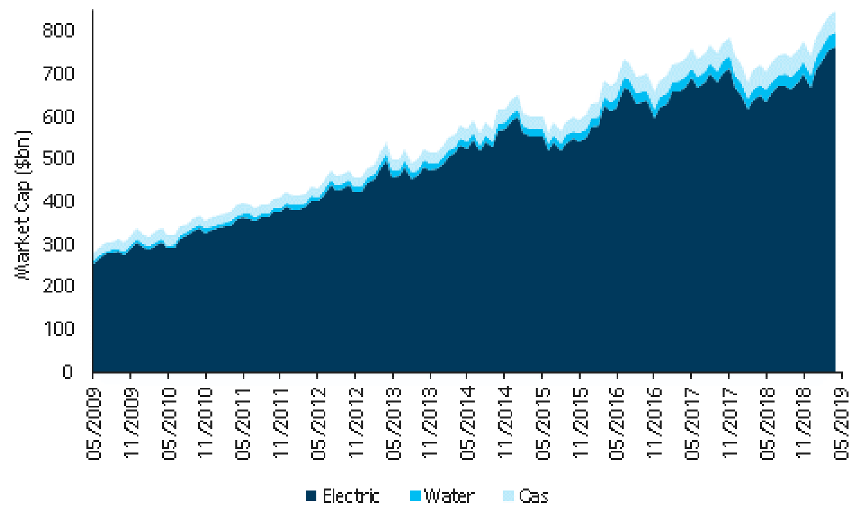
Scarcity Value

Scarcity value for water-focused equity securities likely plays a significant role in driving premiums for water utilities when compared to electric utilities with similar growth and regulatory profiles. The market capitalization of each sector directionally illustrates investable supply (Figure 3), but the true float should be adjusted for insider and passive/index stakes.

ETFs (e.g. CGW) tracking the S&P Global Water Index are popular vehicles for investors to gain broad equity exposure to the global water industry. The index, as described by S&P, seeks to provide liquid and tradable exposure to growing global demand for water and ancillary services (infrastructure, equipment, and materials).

FIGURE 3

US Utility Market Cap by Sub-Sector



Source: Bloomberg, Barclays Research

FIGURE 4

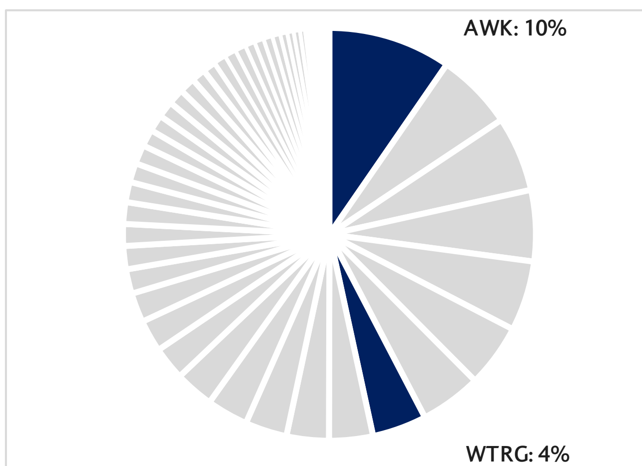
Top 10 Holding in S&P Global Water Index

Company	Weight (%)
American Water Works Co Inc	10
Xylem Inc/NY	6
Danaher Corp	6
Geberit AG	6
Halma PLC	5
Veolia Environnement SA	5
IDEX Corp	5
Essential Utilities Inc	4
United Utilities Group PLC	3

Source: Bloomberg, Barclays Research

FIGURE 5

S&P Global Water Index

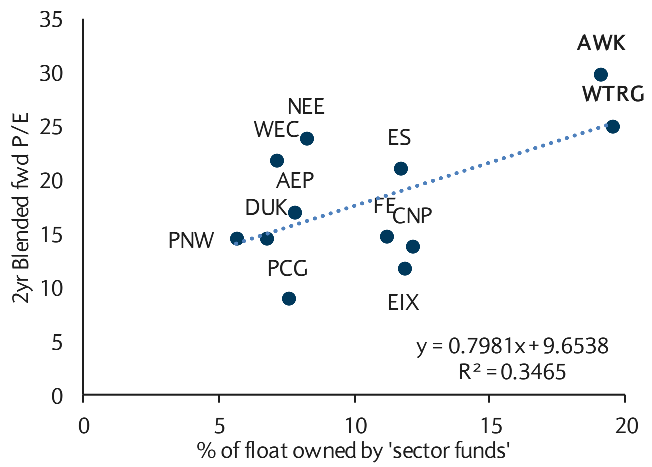


Source: Bloomberg, Barclays Research

This global index exposure is unique to water utilities when compared to electric and gas utilities who receive passive ownership in US utility benchmark indices (AWK and WTRG are also present in most) and is reflected in AWK and WTRG's sector fund and ETF ownership displayed in figures 6 and 9 below. We also believe this added index exposure is reflected in AWK and WTRG's foreign ownership (ESG also likely plays a role) levels. AWK's recent and projected EPS and rate base growth further qualifies the company for growth fund mandates that help broaden the stocks appeal to industry generalists and help to explain the valuation spread between AWK and WTRG (figure 10).

FIGURE 6

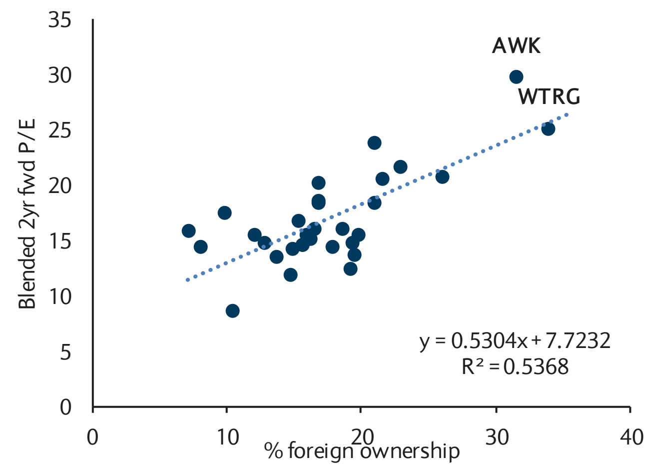
% of shares owned by 'sector funds' vs P/E



Source: Bloomberg, Barclays Research

FIGURE 7

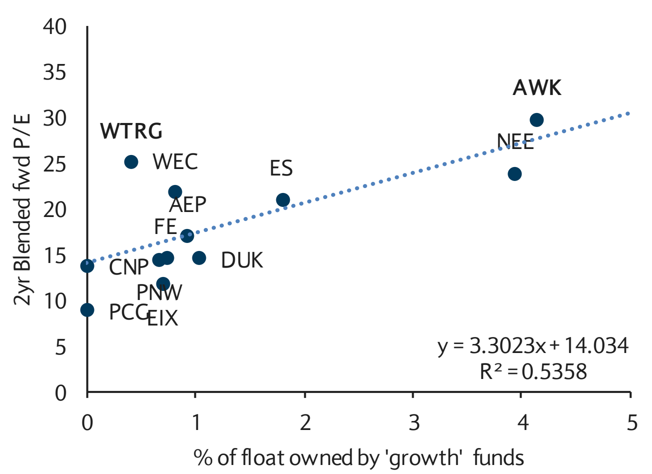
% of shares owned by investors outside of US vs P/E



Source: Bloomberg, Barclays Research

FIGURE 8

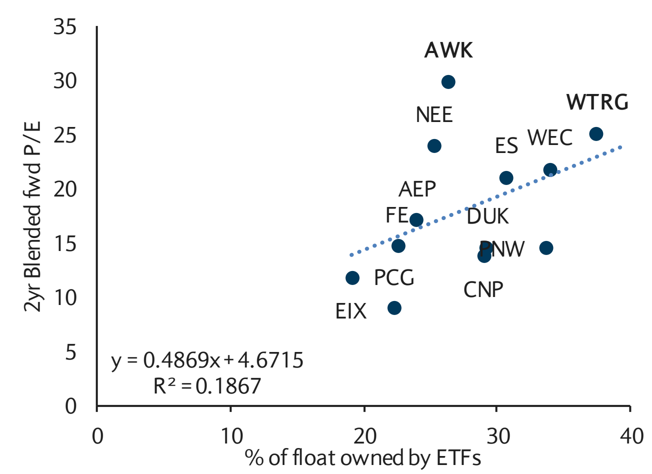
% of shares owned by 'growth funds' vs P/E



Source: Bloomberg, Barclays Research

FIGURE 9

% of shares owned by ETFs



Source: Bloomberg, Barclays Research

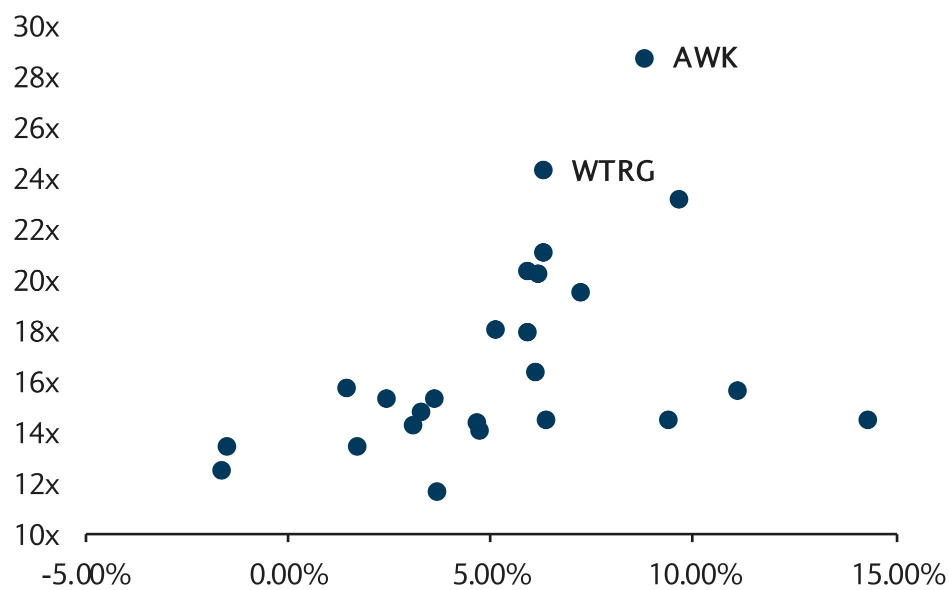
Long-term Growth Outlook

With an average asset age of ~50 years for water and wastewater pipes, the water industry appears to be nearing a generational replacement cycle that should drive capital deployment and rate base growth for the foreseeable future. This opportunity is bolstered by fair market value legislation passed in twelve states (including Virginia as of April 2020 and Texas as of 2019).

There is clearly a strong correlation between realized and expected long-term EPS growth and relative P/E multiples, as investors attempt to ascertain the sustainability of realized growth and CAGR guidance beyond forecast periods and estimate terminal growth assumptions for DCF-based valuation frameworks.

FIGURE 10

EPS CAGR Estimate through 2022 (2018 Base) vs 22E P/E



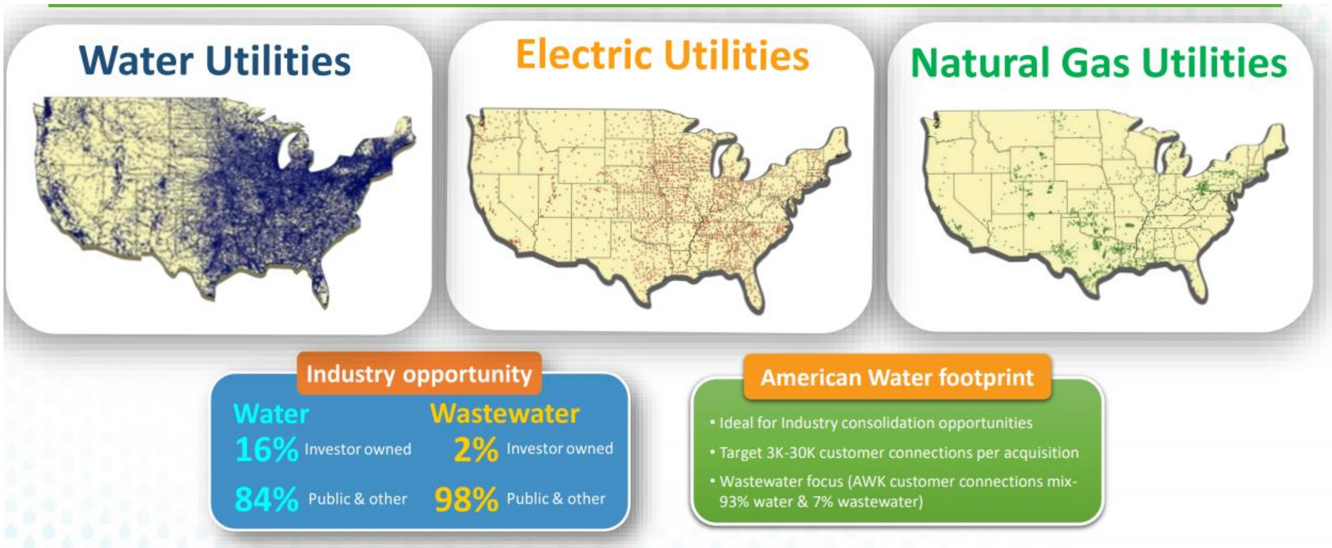
Source: Barclays Research, Bloomberg

Fair Market Value Laws for Public System Acquisitions

Fair Market Value Legislation (FMVL) allows water utilities to purchase fresh water and wastewater systems from public municipalities and add the total cost of the transaction to rate base, rather than the traditional accounting-based asset cost standards held by many regulatory commissions. The opportunity provides incentive for private industry to financial support to public entities and provides water utilities a streamlined way to grow rate base and often provides outsized ongoing capital deployment opportunities given public systems are often under-invested or face strict environmental regulations that require investment that the public agency does not have financial means to make.

The nation-wide asset replacement narrative is bolstered by water utilities' unique opportunity provided by fair market value legislation, allowing IOUs like AWK and WTRG to participate via public system acquisitions. To date, fair market value legislation has passed in twelve states (including Virginia as of April of this year). The FMVL opportunity is unique to water given the far more fragmented nature of public water and waste water systems in the US when compared to electric or gas. While instances of heavy pushback to private acquisitions of public water distribution systems has been seen in recent years, 98% of US wastewater systems are owned by municipalities or other public entities and generally do not carry the same anxieties associated with freshwater distribution assets, making the public perception and path to acquisition approval less burdensome. As such, we expect wastewater acquisitions to dominate transaction volume moving forward.

FIGURE 11
Industry Fragmentation



Source: American Water June Investor Presentation

Can FMVL Start to Really Flow?

There are three key recent and ongoing dynamics driving a view that regulated M&A will increase. The first is the significant capital investments required. The second is a reaction to COVID-19 impacts on tax revenues and local government budgets and the need for alternative and external means for municipalities to finance water and wastewater system investment. The third is an outlook for increasing environmental regulation and legislation to address emerging contaminant treatment (primarily PFAS and aging / lead pipelines).

1) **Significant capital investment required**

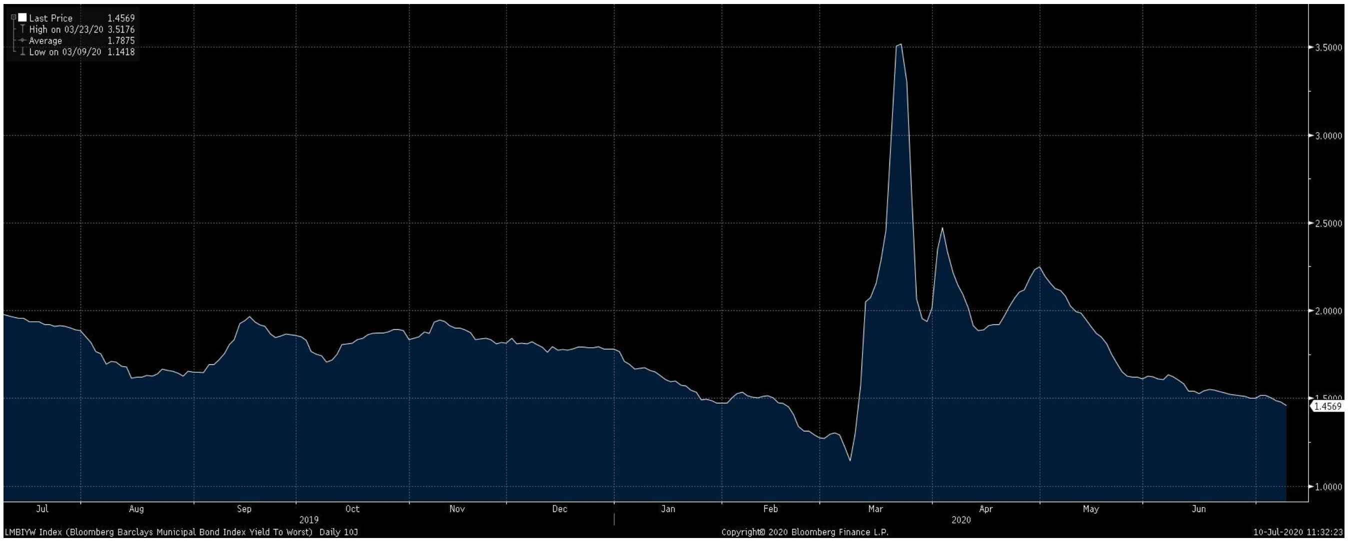
A majority of the water and waste-water systems in the US are approaching or beyond their useful lives. This results in increasing annual capital needs, which if not met put reliability, resiliency and public health and safety at risk. The chronic under investment is generally a function of available tax bonding authority combined with pressured municipality budgets.

2) **Municipal financing cost:**

We view the pressure from COVID-19 related shutdowns on local government finances as a potential driver of increased M&A. Investor-owned utilities can provide capital to execute needed system investments, and public budgets can receive relief in the form of immediate cash inflows (while losing a long-term revenue source). However, all-in financing costs appear to have avoided worst-case scenarios, as evidenced by municipal bond yields as a proxy for total municipal financing costs.

FIGURE 12

Barclays Bloomberg Municipal Bond Index Yield to Worst



Source: Bloomberg

3) Environmental Regulations:

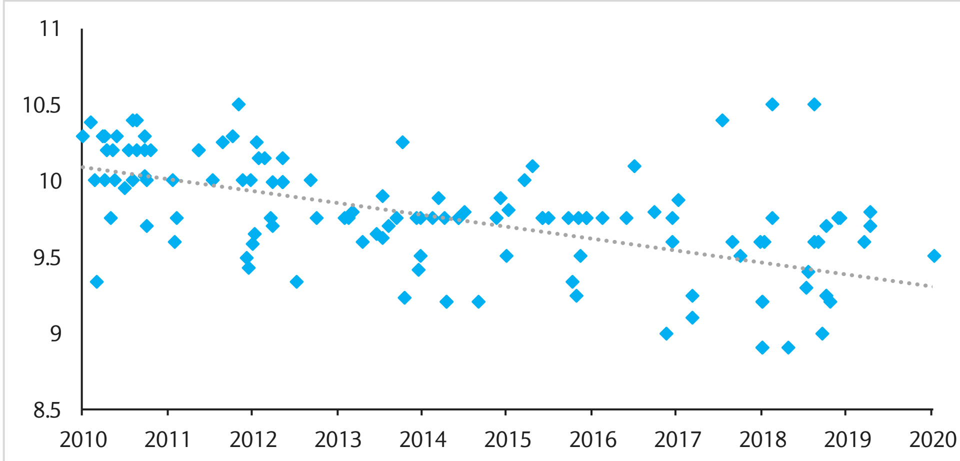
Emerging contaminants like PFAS or 1,4-dioxane have received increased regulatory and legislative attention recently. Numerous new state laws have been introduced over the past few years and national efforts have taken shape to introduce PFAS legislation at a federal level. Emerging contaminants like PFAS are only a health advisory at the EPA, but states have recently chosen to regulate these 'forever chemicals' through state legislatures. Local towns and municipalities with aging infrastructure are already challenged to make investments needed to remain in compliance with many existing environmental regulations and could face further financial pressure given requirements to install water treatment facility upgrades necessary to address new contaminants. Many water companies have already implemented PFAS standards across all systems (~13 parts per trillion seems to be industry standard), but there has been increased pressure from groups like National Association of Water Companies (NAWC) to apply legal requirements to require similar treatment across state and federal jurisdictions.

Trade Off: Added Rate Case Reliance

The nature of the opportunity provides a strong rate base growth avenue; however, it increases water utility reliance on rate cases. It increases susceptibility to ROE lag as larger acquisitions often under-earn until added rate base can be reflected in the revenue requirement recovered in customer bill. This dynamic could be further stretched depending on whether public entities include terms on bill increases as part of the acquisition terms. We assume an average 300bp net lag to authorized for newly-acquired systems, slowly moving back to authorized ROE within three years of the acquisition date after the system is reflected through broader general rate cases. As nationwide ROEs remain under pressure from low interest rates (CAPM), water utilities face more frequent rate cases.

FIGURE 11

Authorized Water ROEs



Source: S&P Market Intelligence, Barclays Research

ESG Analysis

As discussed on page 6, ESG is often viewed as a differentiator for water utilities when compared to their electric and gas counterparts given the lack of generation-related GHG emissions and a perception that operations are safer and more immune to environmental disasters (wildfires, workplace safety, fossil and nuclear waste management). While we agree that water utilities often screen better than electric and gas on scope 1 greenhouse gas emissions and do not directly utilize or transport fossil fuels, they are by no means immune to significant ESG risk exposures from emerging contaminants, wastewater and stormwater chemical use and treatment shortcomings, and potential environmental and safety disasters from spills. This exposure makes management competence and oversight crucial to any ESG-focused investment analysis.

We view the following ESG risks as most critical to discuss with management teams:

- Emerging contaminant standards: Emerging contaminants like PFAS and other effluents are regulated by a rapidly evolving state and federal framework. Top-tier management teams deploy significant research and internal resources to identify risks and play an active role in policy discussions. Best-in-class management teams have scenario planning completed for a variety of regulatory paths and abide by effluent standards that often exceed legally mandated levels to ensure safe drinking water. Utilities should publicly disclose the number of EPA violations related to effluents in annual reporting material.

- Chemical usage and wastewater treatment standards: Wastewater treatment requires heavy chemical usage that can lead to adverse environmental impacts when improperly managed and disposed. Incident histories and internal policies can be supplemented by analyzing EPA violation trends to approximate the relative risk.

- Board oversight: Given the high exposure to potential bribery inherent to any heavily regulated industry and the political nature of public system M&A, the Board should be directly involved in business ethics decisions.

- Energy consumption: Water transportation and treatment is an energy-intensive operation, requiring high levels of electricity usage. Water utilities should disclose total consumption and electricity sources. Analysis of electricity usage and sources can help quantify indirect GHG emission contributions.

- Bill affordability and outlook: We classify customer affordability as a social attribute given the non-discretionary nature of water consumption. With a robust capital outlook, customer affordability and the pace of bill inflation will be critical. The EPA guidelines suggest keeping water bill costs to 2.5% of average family income for residential customers.

- Emergency management plans: Risk of water and chemical spills are inherent to any water utility. We believe strong mitigation systems and quantified risk exposure must be supplemented by a robust and frequently updated environmental response plan to spill events. The plan should be designed to mitigate environmental and social impacts while maintaining safe water services to communities impacted.

- Workplace safety: Workplace safety trends DART rates and OSHA reportable incidents should be analysed to gauge safety program efficacy in recent years.

American Water Works (AWK)

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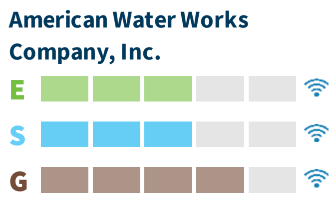
Company description – American Water Works Co., Inc. provides drinking water, wastewater, and other water-related services in multiple states and Ontario, Canada. The company's primary business involves the ownership of regulated water and wastewater utilities that provide water and wastewater services to residential, commercial, and industrial customers.



Blocks show how a company is scored by ESG providers (one block is worst, five are best). Icons show the dispersion of those views (no bars indicates only one score provider, two bars indicate dispersion between providers, full bars indicate aligned views). Source: Barclays Research, Sustainalytics, Vigeo Eiris

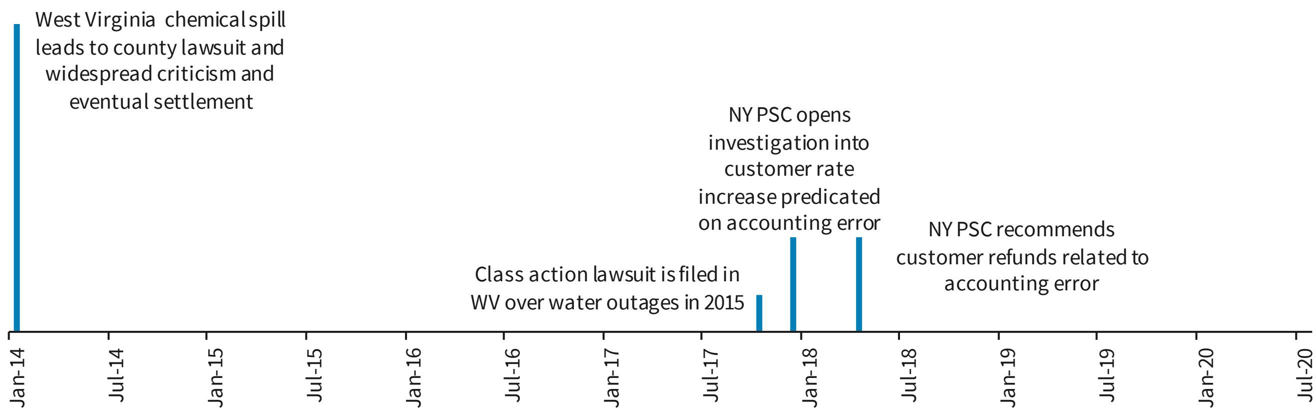
Key conclusions

E AWK receives average environmental ratings, which may be lower than how the average investor thinks about environmental attributes, but accurately reflects negative risk factors balanced by the positive environmental treatment services provided by the company's core operating function, in our view. Said differently, we believe E scores provided by ESG ratings agencies reflect risk factors, rather than the environmental attributes of the business itself. AWK is exposed to environmental risk from effluents that may be insufficiently addressed at AWK's wastewater treatment facilities or leaks and ruptures could lead to environmental disasters when storm water and wastewater contaminate nearby watercourses. American Water has faced minor fines related to improper chemical and hazardous waste, but fewer than industry peers. AWK has experienced no major releases of untreated wastewater or storm water in recent years, while other industry participants have. The risk of large spills of untreated wastewater or storm water remains a material environmental consideration given the impact such releases have on nearby wildlife and water supply.

S AWK's social scores screen as average. We view the social category as inclusive of water waste and water quality. Water scarcity has grown in terms of public knowledge and attention and AWK's (along with the entire water pipeline industry's) lost water amounts could come under increased scrutiny. Lost water can be defined as water that is treated for consumption, but is never delivered to the end use customer due to leakage. This issue is likely to both drive investment capital and risk as average pipe age increases (some pipes are over 100 years old). Our perception is that AWK leads the industry on emerging contaminants, evidenced by environmental policies that often exceed legal requirements and the number of PhD-level specialists and dedicated research labs focused on mitigating potentially harmful particulates not yet regulated directly. However, with growing attention paid to lead levels and other water quality metrics, freshwater delivery quality will remain a risk. Other standard social considerations also apply to American Water, including workplace diversity, community giving, and community relations. Customer bills are a material consideration as water infrastructure ramps up in the United States. AWK highlights average residential bill costs of ~1.9% of average customer family income, versus EPA guidance to keep water bills ~2.5%, however AWK appears to lag WTRG on average customer bill rates.

G American Water's governance scores are above average, which we agree with. As previously noted, our perception is that AWK takes the aggressive and proactive approach necessary to prepare and combat significant safety and environmental risks inherent to the water delivery and treatment business. AWK's Board composition, management compensation structure, and audit quality are consistently ranked among the best in the country. Combined with strong shareholder voting rights and transparent disclosure, we believe governance should be viewed as a differentiator for AWK.

Past and present ESG issues



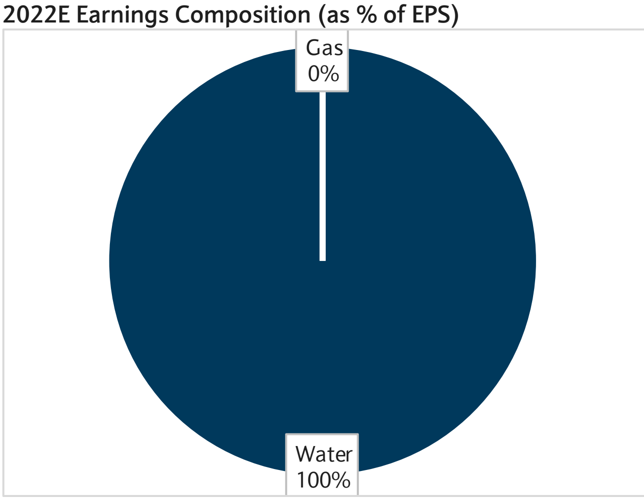
Source: Barclays Research

Risks and management

Category	Risk	Mitigant
E	Wastewater/storm water management	Has effectively avoided major releases of untreated storm and wastewater in prior years.
S	Employee diversity and experience	AWK has workplace diversity working groups and has won numerous inclusion and diversity awards and is recognized in the Bloomberg gender equality index.
S	Health and safety	Has reduced DART rates to 1.13 in 2018 from 2.19 in 2015. Has reduced high-consequence injury rate from 5.26 in 2015 to 3.1 in 2018.
G	Incentive alignment	American Water has published explicit targets tied to ESG performance targets at a board level and has compensation metrics linked to ESG performance.

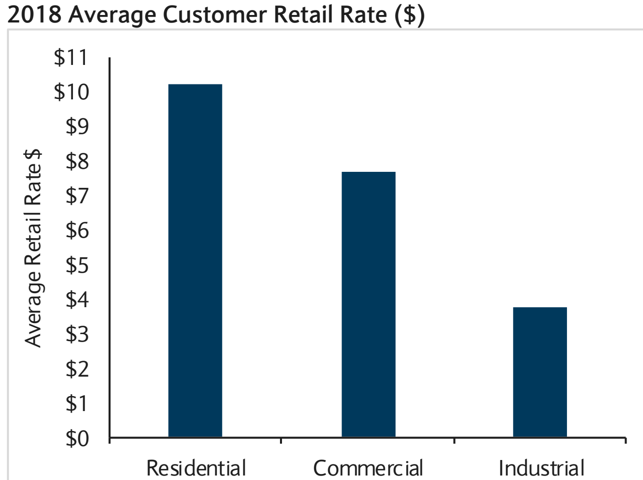
Source: Barclays Research

2022E Earnings Composition (as % of EPS)



Source: Company reports, Barclays Research

2018 Average Customer Retail Rate ($)



Source: Company reports, Barclays Research

Essential Utilities (WTRG)

Equity Research
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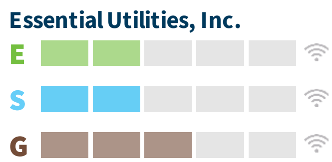
BCI, US

Company description – Essential Utilities, Inc. operates as a water utility company. The company supplies water to residential, commercial, industrial, and public customers. Essential Utilities serves residents through its water and wastewater operations in the Northeastern, Southeastern, and Midwestern United States.



Blocks show how a company is scored by ESG providers (one block is worst, five are best). Icons show the dispersion of those views (no bars indicates only one score provider, two bars indicate dispersion between providers, full bars indicate aligned views). Source: Barclays Research, Sustainalytics, Vigeo Eiris

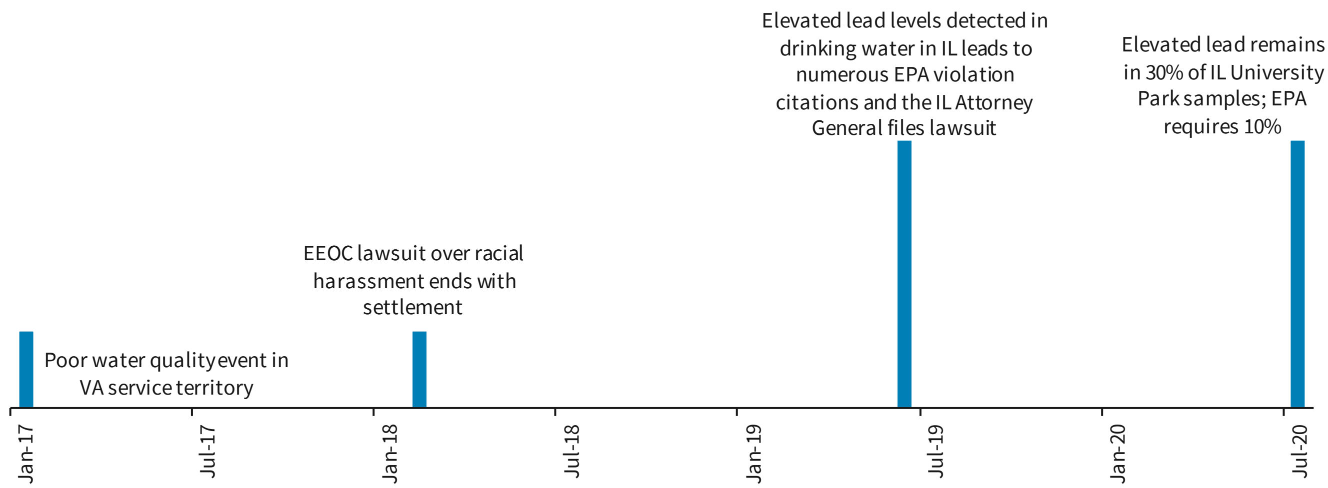
Key conclusions

E Essential receives slightly below average scores for environmental risk factors given below average preparedness and management of potential disasters. We view the ratings as somewhat dated as ratings providers do not contemplate the Peoples natural gas business. WTRG is negatively impacted by a view that the hazardous waste management program lacks management oversight, seemingly from WTRG's lack of EMS certification and emergency response program. While ratings providers take specific issue with the management of environmental risks, we see little evidence that WTRG is lacking relative to other management teams in the water industry. Overall, we view WTRG as equally exposed to environmental risks inherent to the water industry as any other industry participant and applaud WTRG for a robust data disclosure on environmental issues.

S Essential receives below average social ratings due to similar management issues as discussed in the environmental section. We note WTRG has disclosed a fairly robust effluent management system with data supporting its claim that it takes emerging contaminants seriously (citing 95.5% of days in compliance and 272 effluent quality 'events' in 2019). We also highlight that WTRG's average retail rate is lower than the average industry rate on a consolidated average basis across its service territory. DART rates hover around 2.1, slightly higher than industry average. Similar to industry peers, community giving is also prioritized.

G WTRG's Governance ratings are average. Governance risk factors material to WTRG's ratings include a high susceptibility to bribery concerns given the public regulated nature of operations and previous reliance on municipality O&M contracts (though largely divested now). We view the ratings as somewhat stale given the immaterial contribution of municipal O&M contracts. Balancing the downside risks, we note significant management compensation incentives aligned with shareholder and public stakeholder interests. WTRG has explicit long-term and short-term incentives linked to realized ROE, public M&A growth, and O&M inflation management, all of which we view as material to the holistic stakeholder value proposition for a consolidated WTRG.

Past and present ESG issues



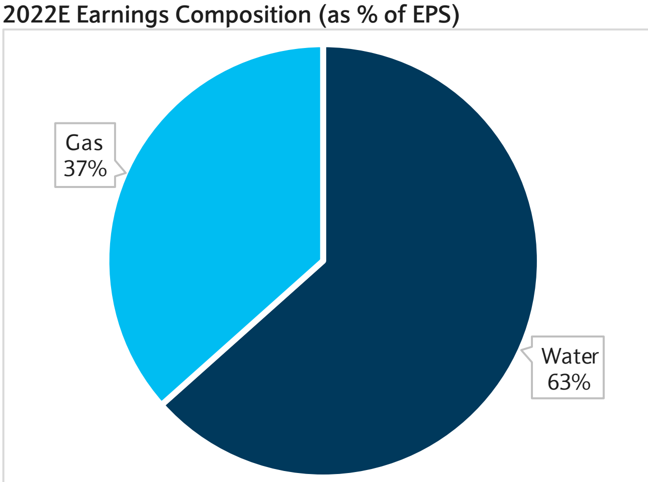
Source: Barclays Research

Risks and management

Category	Risk	Mitigant
E	Wastewater/storm water management	Has effectively avoided major releases of untreated storm and wastewater in prior years.
S	Employee diversity and experience	WTRG has workplace diversity working groups.
S	Health and safety	Has maintained DART rates near 2.1 in 2016-2018. Has reduced lost workdays rate to 102 in 2019 from 568 in 2017.
G	Incentive alignment	We view WTRG's compensation incentives as strongly transparent and well aligned with all stakeholders, with explicit ROE, O&M, public M&A financial targets and strong community involvement and safety targets also embedded.

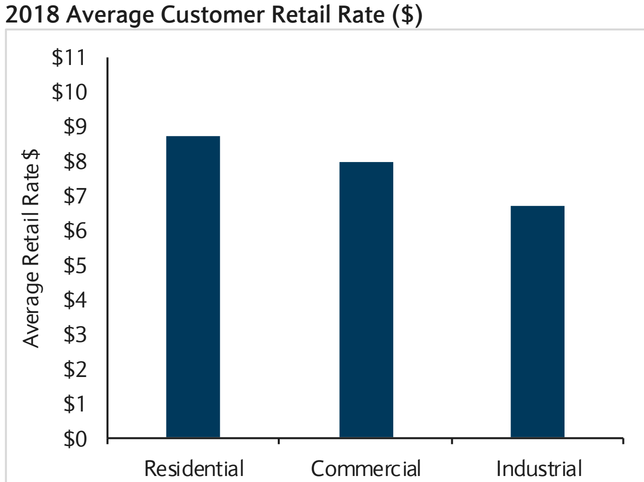
Source: Barclays Research

2022E Earnings Composition (as % of EPS)



Source: Company reports, Barclays Research

2018 Average Customer Retail Rate ($)



Source: Company reports, Barclays Research

Applying Views to Individual Stocks

Barclays Valuation Framework Refresher:

We apply our standard valuation framework used for electric and gas utilities to derive a premium or discount to a group average multiple (in this case we use a water group average multiple of 27x). Our valuation framework takes into account regulatory jurisdiction exposure (capital trackers, ROE trends, other recent commission decisions), geographic trends (population growth, GDP per capita, other general economic activity), long-term growth guidance and visibility, and a qualitative assessment of investor sentiment. The qualitative investor sentiment attribute seeks to encapsulate ESG characteristics and general risk exposures to idiosyncratic issues potentially impacting earnings and providing added earnings variability relative to published financial estimates.

Barclays Water Valuation Framework:

We apply a 15% premium to the group average water multiple for AWK and a 5% premium for WTRG. AWK's premium reflects diversified regulatory and geographic exposure, disproportionate exposure to jurisdictions with DSIC and other constructive capital recovery mechanisms, strong management and competitive position as industry leader, ESG exposure, peer-leading EPS CAGR and multi-decade capex visibility.

WTRG receives a 5% premium to the group average multiple also reflecting disproportionate exposure to strong PA regulatory environment and capital recovery mechanisms, balanced by lower EPS growth, capital guidance visibility and some risk around current M&A deals (namely Delcora). We apply a 15% premium to the 17x utility group average multiple used for all other utility valuation for the regulated gas business (Peoples acquisition) in PA, strong EPS and rate base growth, and our view that constructive regulatory relationships will translate to stable earnings growth in PA.

FIGURE 12

Water Valuation and Price Targets

WTRG PT Methodology	
Regulated Water Business	
22E EPS	$1.24
Group P/E	27.0x
Premium / Discount	5%
Effective 22 P/E	28.4x
PT Contribution	$35
Regulated Gas Business	
22E EPS	$0.72
Group P/E	17.0x
Premium / Discount	15%
Effective 22 P/E	19.6x
PT Contribution	$14
Parent drag	
22E EPS	-$0.15
Blended 22 P/E	25.8x
PT Contribution	-$4
Total Price Target	
Price Target	**$45**
Current Price	$42.90
Price Return	5.8%
Dividend Yield	2.4%
Total Return	**8.2%**

AWK PT Methodology	
Regulated Water Business	
22E EPS	$4.46
Group P/E	27.0x
Premium / Discount	15%
Effective 22 P/E	31.1x
PT Contribution	$138
Regulated Gas Business	
22E EPS	N/A
Group P/E	N/A
Premium / Discount	N/A
Effective 22 P/E	N/A
PT Contribution	N/A
Parent drag	
22E EPS	N/A
Blended 22 P/E	N/A
PT Contribution	N/A
Total Price Target	
Price Target	**$138**
Current Price	$131.00
Price Return	5.7%
Dividend Yield	1.7%
Total Return	**7.4%**

Source: Barclays Research

Upside Scenario:

For our upside scenario we apply the same relative premium / discount framework for WTRG, but we assume all of WTRG earnings receive a consolidated water group multiple and we assume AWK's premium expands to trade at a 25% premium to the water group average multiple.

FIGURE 13

Upside Scenario

WTRG Upside Scenario	
Regulated Water Business	
22E EPS	$1.82
Group P/E	27.0x
Premium / Discount	5%
Effective 22 P/E	28.4x
Contribution	$52
Regulated Gas Business	
22E EPS	$0.00
Group P/E	17.0x
Premium / Discount	15%
Effective 22 P/E	19.6x
Value	$0
Parent drag	
22E EPS	$0.00
Blended 22 P/E	28.4x
Value	$0
Upside Value	
Upside Value	**$52**
Current Price	$43.44
Price Return	18.8%
Dividend Yield	2.3%
Total Return	**21.1%**

AWK Upside Scenario	
Regulated Water Business	
22E EPS	$4.46
Group P/E	27.0x
Premium / Discount	25%
Effective 22 P/E	33.8x
Value	$151
Regulated Gas Business	
22E EPS	N/A
Group P/E	N/A
Premium / Discount	N/A
Effective 22 P/E	N/A
Value	N/A
Parent drag	
22E EPS	N/A
Blended 22 P/E	N/A
Value	N/A
Upside Value	
Upside Value	**$151**
Current Price	$132.92
Price Return	13.2%
Dividend Yield	1.7%
Total Return	**14.9%**

Source: Barclays Research

Downside Scenario:

For our downside scenario, we apply the same relative premium / discount framework for both names, but assume AWK and WTRG trade back to the US utility group average multiple.

FIGURE 14

Downside Scenario

WTRG Downside Scenario	
Regulated Water Business	
22E EPS	$1.25
Group P/E	17.0x
Premium / Discount	5%
Effective 22 P/E	17.9x
Value	$22
Regulated Gas Business	
22E EPS	$0.72
Group P/E	17.0x
Premium / Discount	15%
Effective 22 P/E	19.6x
Value	$14
Parent drag	
22E EPS	-$0.15
Blended 22 P/E	18.5x
Value	-$3
Downside Value	
Downside Value	**$34**
Current Price	$43.44
Price Return	-22.6%
Dividend Yield	2.3%
Total Return	**-20.3%**

AWK Downside Scenario	
Regulated Water Business	
22E EPS	$4.46
Group P/E	17.0x
Premium / Discount	15%
Effective 22 P/E	19.6x
Value	$87
Regulated Gas Business	
22E EPS	N/A
Group P/E	N/A
Premium / Discount	N/A
Effective 22 P/E	N/A
Value	N/A
Parent drag	
22E EPS	N/A
Blended 22 P/E	N/A
Value	N/A
Downside Value	
Downside Value	**$87**
Current Price	$132.92
Price Return	-34.4%
Dividend Yield	1.7%
Total Return	**-32.7%**

Source: Barclays Research

American Water Works (AWK)

Investment Thesis:

AWK provides a peer-leading 7-10% EPS CAGR through 2024 (off of 2018 EPS) driven by regulated investment (5-7% annual contribution to EPS growth), public M&A (likely weighted more toward wastewater; 1-2% annual contribution to EPS growth), and market-based businesses (homeowner services and military services provide 1-2% contribution to annual EPS growth).

We expect AWK to continue to identify accretive capex and public system acquisition opportunities throughout the forecast period, balanced by $500mn of block equity financing weighted toward the middle of the forecast period (we reflect $450mn in 2022 in our model assumptions, but see optionality to delay to 2023), which helps to address increasing parent leverage. Customer bills remain a material consideration as needed investment and public acquisition costs are recovered in rates. O&M efficiency should remain the center of focus for management, and we expect bills to be managed at or below inflation, while also seeking to keep total water bills <2.5% of average family income, per EPA best practices (AWK current avg ~1.9%).

We concede that AWK screens expensive on a P/E basis to any water, electric and gas comps. However, we do not get the impression that earnings expectations are unreasonable, nor do we expect any material unconsidered risk factors to emerge. ESG factors (lack of generation primarily) and scarcity value have led to a sustainable demand premium to electric equities, requiring the use of a water group multiple separate from electric and gas. We apply a 15% premium to the group average multiple (discussed in greater detail in valuation section) to reflect AWK's strong long-term growth visibility, peer-leading EPS CAGR, and constructive regulatory treatment.

Key Regulatory Proceedings:

Pennsylvania: PA represents ~28% of AWK's regulated rate base and benefits from strong capital tracking mechanisms via Distribution System Improvement Charges (DSIC). ROE for the DSIC investment rider is updated via the state's quarterly earnings review. PA's most-recent update held water ROEs at 9.9%. American Water's current Pennsylvania general rate case requests a $92mn rate step up effective January 1, 2021, and a step-up of $46mn in 2022 reflecting a 10.8% ROE (current 10%) and a rate base of $3.98bn in 2021 and $4.29bn in 2022. We assume the 10% ROE currently reflected in rates remains in place and rate increases sufficient to allow PA to earn its allowed returns in 2021 and 2022.

New Jersey: AWK's New Jersey general rate case is seeking an $88mn base rate increase in 2021, reflecting a $3.63bn rate base, 10.5% ROE (current 9.6% authorized), and an assumed 54% equity layer. We note that the $88mn request is incremental to an expected $35mn rate increase contribution from the NJ DSIC mechanism. We assume NJ receives a 9.6% ROE and comparable cap structure, with rate increases adequate to earn implied authorized returns against a $3.6bn rate base as of year-end 2020.

California: CA benefits from forward-looking rate cases with strong precedent of including attrition and capital cost adjustments and a disaggregated cost of capital proceeding reducing general rate case risk (current ROE set at 9.2% with 55.39% equity layer). AWK's current CA rate case requests a $27mn increase effective 1Q21 and a $9.8mn step-up in 2022.

Virginia: AWK's current VA rate case reflects only $196mn of total rate base and requests a $5.6mn rate increase. Interim rates became effective on May 19, 2020, and the case contemplates ~$100mn of infrastructure investments since 2017.

Missouri: AWK's most-recently filed rate case is in Missouri, where the company is requesting a $74mn rate increase to reflect $490mn of investment since the last filing.

Earnings Estimates and Rate Base Model:

FIGURE 15
AWK EPS Model Summary

	2017A	2018A	2019A	2020E	2021E	2022E
Average Shares Outstanding - Diluted	179.0	180.0	181.0	181.3	181.8	183.5
Earnings per Share	**$2.38**	**$3.15**	**$3.43**	**$3.86**	**$4.22**	**$4.60**
Guidance CAGR Implied EPS - Midpoint		*$3.30*	*$3.58*	*$3.88*	*$4.22*	*$4.57*
Guidance CAGR Implied EPS - Low		*$3.30*	*$3.53*	*$3.78*	*$4.04*	*$4.33*
Guidance CAGR Implied EPS - High		*$3.30*	*$3.63*	*$3.99*	*$4.39*	*$4.83*
Regulated Utility EPS	**$3.12**	**$3.34**	**$3.61**	**$3.92**	**$4.20**	**$4.46**
% of total AWK EPS	*94%*	*96%*	*93%*	*91%*	*90%*	*89%*
Market-Based EPS	**$0.21**	**$0.16**	**$0.25**	**$0.39**	**$0.45**	**$0.53**
% of total AWK EPS	*6%*	*4%*	*7%*	*9%*	*10%*	*11%*
Parent EPS	**($0.99)**	**($0.38)**	**($0.51)**	**($0.44)**	**($0.43)**	**($0.38)**
Dividend per share	$1.62	$1.78	$1.96	$2.15	$2.34	$2.55
Payout - target 50-60%	*68%*	*57%*	*57%*	*56%*	*56%*	*56%*
Growth Yoy - target top end of 7-10%		*9.9%*	*10.1%*	*9.7%*	*9.0%*	*9.0%*

Source: Barclays Research, Company presentations

FIGURE 16
Rate Base Summary

Rate Base ($mn)	2020E	2021E	2022E
Total American Water			
Starting Year Rate Base	13,700	14,731	15,625
Capex	1,600	1,500	1,700
Capex Guidance (8.2bn 20-24)	*1,600*	*1,500*	*1,600*
DD&A	569	607	649
Ending Year Rate Base	14,731	15,625	16,676
7-8% Guidance CAGR Implied	*14,445*	*15,529*	*16,693*
Growth YoY (%)	*7.5%*	*6.1%*	*6.7%*
Average Rate Base	**14,216**	**15,178**	**16,150**
Equity Layer (%)	52.65%	52.65%	52.65%
Authorized ROE (%)	9.77%	9.77%	9.77%
Implied Net Income	731	781	831
Below the line items / adjustments	(21)	(17)	(13)
Modeled Net Income	710	763	818

Source: Barclays Research

Risks:

Upside

AWK will likely outperform if M&A opportunities outpace current expectations and EPS grows faster than expected. AWK will also likely outperform if ESG flows increase, general demand for utility equities increase and disproportionately benefit water utilities, O&M reductions are above expectations, or ROE trends benefit earnings.

Downside

AWK will likely underperform if interest rates remain low or decline and impact authorized ROEs, volumes decline materially as a result of COVID-19, heightened M&A activity and competitiveness result in increased ROE lag, FFO metrics deteriorate and require increased equity financing contributions, or operational and environmental accidents impact ESG scores and flows.

Essential Utilities (WTRG)

Investment Thesis:

Essential Utilities closed its transformative acquisition of Peoples Gas in March 2020. The transaction is likely to be accretive to earnings and long-term rate base growth, but it took WTRG from a pure-play water utility to a combined water and natural gas LDC company. The impact from an ESG perspective will be fully reflected over time, but we believe the earnings and growth accretion from the deal helps to put WTRG on a financial trajectory more competitive with industry leaders like AWK. The deal provides gas rate base growth of 8-10%, versus 6-7% water rate base growth through the same forecast period. We view the backlog of necessary gas system investment as providing a strong runway of capital eligible for recovery under the DSIC mechanism, and we highlight the updated pipe replacement programs that provide visibility into 15+ years of investment opportunity and assumes ~200 miles of pipe per year is sustained.

Near-term focus for the investment community is on repairs tax implications to earnings and the closing of the Delcora water system acquisition. While repairs tax election (discussed below) is already helping to support financials in 2020, the remaining catch-up portion remains a key point of debate. We see repairs tax as less likely to provide material upside to estimates, but moreso as a useful tool to upcoming rate case negotiations in PA that should allow WTRG to earn its allowed ROE moving forward while limiting customer bill impacts from otherwise necessary rate increases.

Key Regulatory Proceedings:

Repairs tax and PA rate case outlook: - Repairs tax allows immediate expensing of capex deployed for infrastructure repairs for tax purposes, providing significant tax savings relative to tax rates assumed in ratemaking. The repairs tax situation has two components that contribute to the expected earnings outlook for WTRG. The initial component of repairs tax election is already flowing through financials and is expected to provide \$0.08-\$0.12 of EPS help for FY20. The second component is the 'catch up' component of repairs tax election – or how much income tax saving is passed through to customers versus retained for shareholders. The prior commission precedent allocated shareholders seven of the ten total years of amortization benefits from the tax savings to shareholders. We view that prior decision as a very constructive outcome. While we do not assume the same treatment in the current round, we again view the repair tax situation as a helpful tool that WTRG possesses for purposes of negotiation in the context of its PA rate case plans (likely to allows for rate case stay outs and other customer commitments rather than purely incremental to growth guidance and assumptions).

DELCORA: - WTRG signed with the Delaware County Regional Water Control Authority (DELCORA) to purchase its wastewater system serving 42 municipalities and ~500k customers for \$277mn. DELCORA has line of sight to ~\$700mn capex through 2028; however, increasing environmental requirements with the Philadelphia Water Department (one of DELCORA's wastewater offtake and treatment facilities) imply potential investment requirements of >\$1bn will be needed ahead of contract renewal in 2028. The investment would require significant customer bill increases and heavy financing strain on the public authority.

WTRG's purchase agreement effectively takes the \$277mn of transaction proceeds and allocates it to a customer bill trust that would mitigate customer bill impacts following system investment. As part of WTRG's solution, the wastewater would be directed away from the Philadelphia Water Department facility to one of its own treatment facilities, avoiding worst-case environmental-related capex requirements and providing WTRG opportunities to acquire other fragmented local wastewater systems that currently send wastewater through the DELCORA system.

The process has become heavily politicized, as some Delaware County representatives seek to block the transaction and restructure the customer bill trust established in the binding sale agreement. The county officials have intervened in the PUC approval process and have filed a lawsuit alleging the transaction is not permitted under current legal provisions. We expect the transaction to remain 'noisy' given the politicized nature, but ultimately we expect the deal to go through without significant changes. We note delays and ultimate approval are not material to financial estimates throughout the forecast period.

Earnings Estimates and Rate Base Model:

FIGURE 17

WRTG: Water Rate Base Summary

Water Summary	2020E	2021E	2022E
Capex ($mn)			
Pennsylvania	376	393	410
Ohio	38	39	41
Illinois	39	41	43
Texas	33	34	36
New Jersey	22	23	24
North Carolina	25	26	27
Indiana	9	10	10
Virginia	9	9	9
Total Regulated Capex	**550**	**575**	**600**
Year End Rate Base ($mn)			
Pennsylvania	3,691	3,962	4,243
Ohio	370	397	425
Illinois	385	413	442
Texas	321	345	369
New Jersey	215	231	247
North Carolina	247	265	284
Indiana	90	97	104
Virginia	84	90	97
Total Year End Water Rate Base	**5,402**	**5,800**	**6,211**
Implied Earnings (($mn)			
Rate Base Implied Net Income	277	293	309
Net Income from Acquisitions	1	8	16
Implied Total Regulated Water Net Income	**278**	**301**	**326**
Modeled Regulated Net Income	*286*	*302*	*328*

Source: Barclays Research

FIGURE 18

WRTG: Gas Rate Base Summary

Gas Summary	2020E	2021E	2022E
Capex ($mn)			
Pennsylvania	376	380	374
West Virginia	20	16	16
Kentucky	4	4	4
Total Regulated Capex	**400**	**400**	**394**
Year End Rate Base ($mn)			
Pennsylvania	2,405	2,666	2,906
West Virginia	131	139	146
Kentucky	28	30	32
Total Year End Gas Rate Base	**2,565**	**2,834**	**3,083**
Implied Earnings (($mn)			
Rate Base Implied Net Income	152	170	186
Modeled Regulated Net Income	*142*	*166*	*188*

Source: Barclays Research

Risks:

Upside

WTRG would likely outperform if repairs tax accretion exceeds expectations and results in incremental growth relative to guidance, currently contemplated M&A is approved in an expedited timeframe, or new M&A deals are announced and provide greater-than-anticipated accretion to growth. WTRG could also outperform if ESG flows increase, general demand for utility equities increases and disproportionately benefits water utilities, O&M reductions are above expectations, or ROE trends benefit earnings.

Downside

WTRG would likely underperform if Peoples integration faces operational challenges, volumes decline materially as a result of COVID-19 or mild weather in gas service territories, rate case outcomes negatively impact earnings, M&A deals face increased scrutiny and legal challenges, deal competitiveness results in increased ROE lag, FFO metrics deteriorate and require increased equity financing contributions, or operational and environmental accidents impact ESG scores and flows.

North America Power & Utilities — **Industry View: POSITIVE**

American Water Works Company, Inc. (AWK)

Stock Rating: EQUAL WEIGHT

Income statement ($mn)	2019A	2020E	2021E	2022E	CAGR
Revenue	3,610	3,817	4,041	4,303	6.0%
EBITDA (adj)	2,032	2,222	2,373	2,532	7.6%
EBIT (adj)	1,450	1,598	1,708	1,822	7.9%
Pre-tax income (adj)	833	937	1,027	1,131	10.7%
Net income (adj)	621	700	766	844	10.8%
EPS (adj) ($)	3.77	3.86	4.22	4.60	6.9%
Diluted shares (mn)	181	181	182	184	0.5%
DPS ($)	1.96	2.15	2.34	2.55	9.2%

Margin and return data					Average
EBITDA (adj) margin (%)	56.3	58.2	58.7	58.8	58.0
EBIT (adj) margin (%)	40.2	41.9	42.3	42.3	41.7
Pre-tax (adj) margin (%)	23.1	24.6	25.4	26.3	24.8
Net (adj) margin (%)	17.2	18.3	19.0	19.6	18.5
ROIC (%)	9.3	10.0	10.1	10.2	9.9
ROA (%)	2.9	3.1	3.3	3.5	3.2
ROE (%)	10.6	11.4	11.8	12.2	11.5

Balance sheet and cash flow ($mn)					CAGR
Tangible fixed assets	23,941	25,741	27,496	29,426	7.1%
Cash and equivalents	60	34	33	46	-8.4%
Total assets	22,682	23,265	24,355	25,588	4.1%
Short and long-term debt	9,453	9,552	9,971	10,091	2.2%
Other long-term liabilities	0	0	0	0	N/A
Total liabilities	7,917	8,339	8,322	8,599	2.8%
Shareholders' equity	6,121	6,496	6,907	7,733	8.1%
Net debt/(funds)	9,393	9,518	9,938	10,045	2.3%
Change in working capital	504	-592	-1	13	-70.3%
Cash flow from operations	1,383	1,434	1,691	1,841	10.0%
Capital expenditure	-1,654	-1,650	-1,555	-1,755	N/A
Free cash flow	-859	-756	-490	-558	N/A

Valuation and leverage metrics					Average
P/E (adj) (x)	35.3	34.4	31.5	28.9	32.5
EV/EBITDA (adj) (x)	28.4	26.1	24.6	23.2	25.6
EV/EBIT (adj) (x)	39.8	36.2	34.2	32.2	35.6
FCF yield (%)	-1.5	-1.3	-0.8	-0.9	-1.1
P/BV (x)	3.9	3.7	3.5	3.2	3.6
Dividend yield (%)	1.5	1.6	1.8	1.9	1.7
Net debt/EBITDA (adj) (x)	4.6	4.3	4.2	4.0	4.3

Selected operating metrics					Average
Payout ratio (%)	57.1	55.7	55.6	55.5	56.0
Interest cover (x)	3.8	4.2	4.5	4.9	4.3
Regulated (%)	N/A	N/A	N/A	N/A	N/A

Price (13-Jul-2020) USD 132.97

Price Target USD 138.00

Why Equal Weight? AWK presents a strong growth profile with top-tier management and a solid execution track record, however valuation is stretched relative to electric and gas utilties and our valuation framework implies a 15% premium to the water group average P/E multiple, all of which is fully reflected in the current stock price

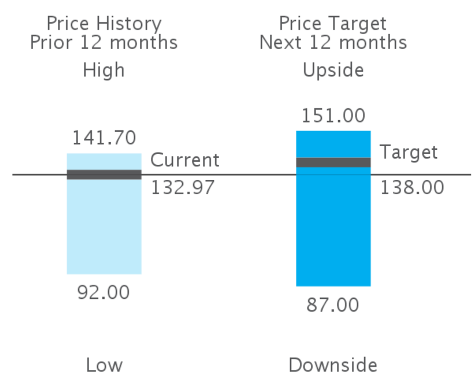
Upside case USD 151.00

Our upside case assumes AWK trades at a 25% premium to the group average water utility P/E multiple. We believe this scenario could materialize if ESG flows increase or general utility equity demand rises and disproportionately benefits AWK.

Downside case USD 87.00

Our downside case values AWK on the same 15% premium, but applies the group utitlity multiple in lieu of the water group multiple. This could materialize if investors perceive long-term growth opportunities and ESG profiles to be similar to electric and gas.

Upside/Downside scenarios



Source: Company data, Bloomberg, Barclays Research
Note: FY End Dec

North America Power & Utilities — **Industry View: POSITIVE**

Essential Utilities, Inc. (WTRG)

Stock Rating: EQUAL WEIGHT

Income statement ($mn)	2019A	2020E	2021E	2022E	CAGR
Revenue	890	1,880	2,081	2,312	37.5%
EBITDA (adj)	517	911	995	1,100	28.6%
EBIT (adj)	361	634	690	767	28.6%
Pre-tax income (adj)	261	436	493	551	28.3%
Net income (adj)	263	398	433	476	21.9%
EPS (adj) ($)	1.47	1.56	1.67	1.82	7.4%
Diluted shares (mn)	179	255	260	262	13.5%
DPS ($)	0.91	0.96	1.02	1.08	6.0%

Margin and return data					Average
EBITDA (adj) margin (%)	58.1	48.5	47.8	47.6	50.5
EBIT (adj) margin (%)	40.6	33.7	33.2	33.2	35.2
Pre-tax (adj) margin (%)	29.4	23.2	23.7	23.8	25.0
Net (adj) margin (%)	29.6	21.2	20.8	20.6	23.0
ROIC (%)	3.7	7.3	7.4	7.7	6.5
ROA (%)	N/A	3.1	3.2	3.3	3.2
ROE (%)	N/A	8.6	9.1	9.1	8.9

Balance sheet and cash flow ($mn)					CAGR
Tangible fixed assets	10,795	11,745	12,720	13,720	8.3%
Cash and equivalents	32	31	55	0	-100.0%
Total assets	12,929	13,601	14,295	14,907	4.9%
Short and long-term debt	5,225	3,950	4,075	4,572	-4.4%
Other long-term liabilities	766	2,531	2,561	2,423	46.8%
Total liabilities	8,315	8,844	9,058	9,492	4.5%
Shareholders' equity	4,613	4,765	5,236	5,429	5.6%
Net debt/(funds)	5,193	3,919	4,020	4,572	-4.2%
Change in working capital	N/A	0	-1	24	N/A
Cash flow from operations	0	713	798	884	N/A
Capital expenditure	0	-950	-975	-1,000	N/A
Free cash flow	0	-514	-753	-456	N/A

Valuation and leverage metrics					Average
P/E (adj) (x)	29.5	27.8	26.0	23.8	26.8
EV/EBITDA (adj) (x)	46.3	28.4	26.3	24.4	31.3
EV/EBIT (adj) (x)	66.2	40.8	38.0	35.0	45.0
FCF yield (%)	0.0	-2.0	-2.9	-1.7	-1.6
P/BV (x)	N/A	N/A	N/A	N/A	N/A
Dividend yield (%)	2.1	2.2	2.4	2.5	2.3
Net debt/EBITDA (adj) (x)	10.0	4.3	4.0	4.2	5.6

Selected operating metrics					Average
Payout ratio (%)	61.9	61.8	61.4	59.5	61.1
Interest cover (x)	3.0	4.6	5.2	5.3	4.5
Regulated (%)	N/A	N/A	N/A	N/A	N/A

Price (13-Jul-2020)	USD 43.37
Price Target	USD 45.00

Why Equal Weight? We believe the recent Peoples acquisition is constructive given its accretion to growth and EPS, however we value WTRG on a sum of the parts basis and apply the utility group average P/E multiple, reflecting gas utility peers. The current share price reflects our valuation conclusion.

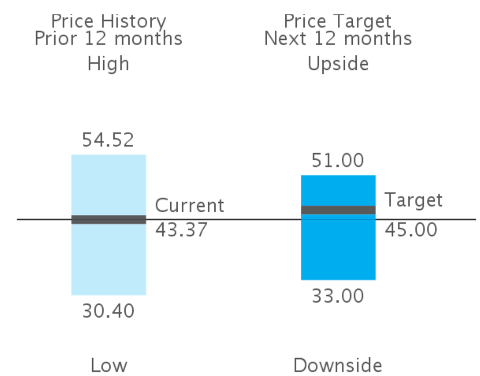
Upside case — USD 51.00

Our upside case assumes WTRG is valued using consolidated EPS against a water group P/E multiple. We believe this case could materialize if scarcity value persists and WTRG is deemed a pure-play water utility, despite the gas contribution to earnings.

Downside case — USD 33.00

Our downside case values WTRG consolidated EPS on the utility group average P/E multiple, while maintaining a 15% premium for the gas business and a 5% premium for water. We think this could materialize if ESG flows lessen or long-term growth appears unsustainable long term.

Upside/Downside scenarios



Source: Company data, Bloomberg, Barclays Research
Note: FY End Dec

Valuation Methodology and Risks

North America Power & Utilities
American Water Works Company, Inc. (AWK)
Valuation Methodology: We utilize a group average water P/E multiple for 2022 earnings and apply a 15% premium to AWK's consolidated 2022 EPS estimate. The premium reflects strong management, constructive regulatory exposure, and top-tier growth visibility.
Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: Risks to AWK include rate case outcomes, public system M&A deals and integration, external financing needs, and general interest rate environments.
Essential Utilities, Inc. (WTRG)
Valuation Methodology: We value WTRG's water business using a 5% premium to the group average water multiple. The 5% premium reflects strong regulatory exposure and public M&A opportunities, balanced by growth visibility lower than peers. We value the regulated gas business at a 15% premium to reflect a strong growth profile and familiar regulatory exposure.
Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: Risks to WTRG include rate case outcomes and general regulatory treatment, gas price inflation impacts on customer bills, and general interest rate environments.

Source: Barclays Research.

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Primary Stocks (Ticker, Date, Price)

American Water Works Company, Inc. (AWK, 13-Jul-2020, USD 132.97), Equal Weight/Positive, CE/J

Essential Utilities, Inc. (WTRG, 13-Jul-2020, USD 43.37), Equal Weight/Positive, A/CD/CE/D/E/J/K/L/M

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Stock Rating

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North America Power & Utilities		
Alliant Energy Corporation (LNT)	Ameren Corp. (AEE)	American Electric Power Company, Inc. (AEP)
American Water Works Company, Inc. (AWK)	Brookfield Infrastructure Partners LP (BIP)	Brookfield Infrastructure Partners LP (BIP_u.TO)
CenterPoint Energy, Inc. (CNP)	CMS Energy Corporation (CMS)	Consolidated Edison, Inc. (ED)
Dominion Energy (D)	DTE Energy (DTE)	Duke Energy Corporation (DUK)
Edison International (EIX)	Essential Utilities, Inc. (WTRG)	Eversource Energy (ES)
Exelon Corporation (EXC)	FirstEnergy Corp. (FE)	NextEra Energy, Inc. (NEE)
NiSource, Inc. (NI)	NorthWestern Corporation (NWE)	OGE Energy Corp. (OGE)
PG&E Corporation (PCG)	Pinnacle West Capital Corporation (PNW)	PNM Resources, Inc. (PNM)

IMPORTANT DISCLOSURES CONTINUED

Portland General Electric Company (POR)	Public Service Enterprise Group (PEG)	Sempra Energy (SRE)
The Southern Company (SO)	WEC Energy Group, Inc. (WEC)	Xcel Energy Inc. (XEL)

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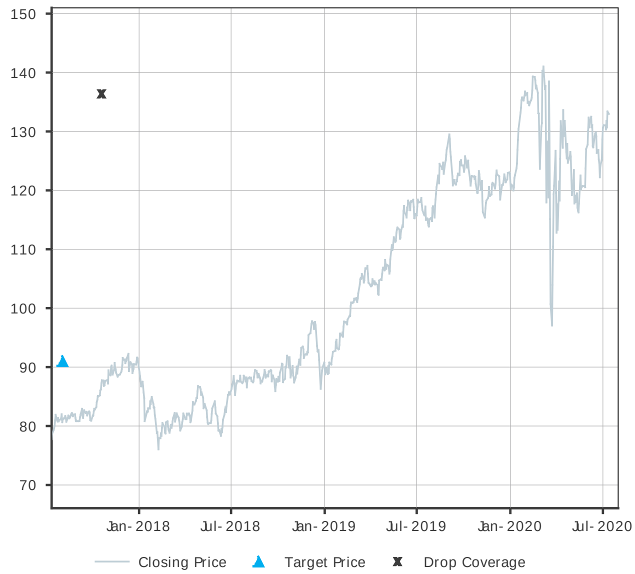
IMPORTANT DISCLOSURES CONTINUED

American Water Works Company, Inc. (AWK / AWK)	Stock Rating	Industry View
USD 132.97 (13-Jul-2020)	**EQUAL WEIGHT**	**POSITIVE**

Rating and Price Target Chart - USD (as of 13-Jul-2020)



Source: IDC, Barclays Research

Currency=USD

Publication Date	Closing Price	Rating	Adjusted Price Target
13-Oct-2017	85.02	Coverage Dropped	
03-Aug-2017	80.65		91.00

Source: Bloomberg, Barclays Research

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Risks which May Impede the Achievement of the Barclays Research Valuation and Price Target: Risks to AWK include rate case outcomes, public system M&A deals and integration, external financing needs, and general interest rate environments.

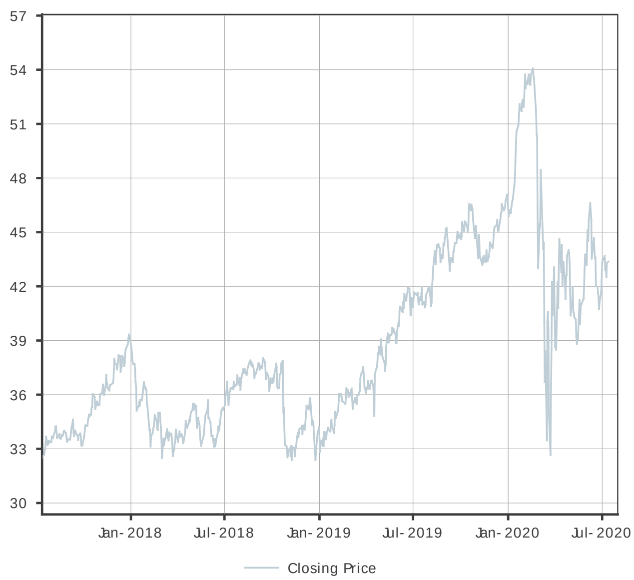
IMPORTANT DISCLOSURES CONTINUED

Essential Utilities, Inc. (WTRG / WTRG)

USD 43.37 (13-Jul-2020)

Stock Rating	Industry View
EQUAL WEIGHT	**POSITIVE**

Rating and Price Target Chart - USD (as of 13-Jul-2020)



Source: IDC, Barclays Research

Currency=USD

Publication Date	Closing Price	Rating	Adjusted Price Target

Source: Bloomberg, Barclays Research

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